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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|---------------------|-------------------|
| 10/764,516 | 01/27/2004 | Raymond Aubin | 71493-1210-aba | 9954 |
| 7380 | 7590 | 10/27/2009 | EXAMINER | |
| SMART & BIGGAR | | | | PASCAL, LESLIE C |
| P.O. BOX 2999, STATION D | | | | ART UNIT |
| 900-55 METCALFE STREET | | | | PAPER NUMBER |
| OTTAWA, ON K1P 5Y6 | | | | 2613 |
| CANADA | | | | |
| | | | | NOTIFICATION DATE |
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| | | | | 10/27/2009 |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

forpara@smart-biggar.ca

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/764,516 | AUBIN ET AL. | |
| | Examiner | Art Unit | |
| | Leslie Pascal | 2613 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 September 2009.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9, 11, 17-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 11 17-25 27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

1. Claim 3 has a typographical error. It does not end in a period (".").
2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-9, 11, 17, 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The process must be tied to another statutory class (such as a particular apparatus) or transform underlying subject matter (such as an article or materials) to a different state or thing.

The present claims 1, 8 are not tied to an apparatus that provides the method steps. For example, in claim 1 there are no means that provide the steps of generating a basic capacity (and performing analysis of claim 8). Further, it appears that this could be provided by a mental step. A network designer could determine basic packet capacity based on packet network topology information and packet traffic information and determine basic optical capacity and a capacity value for each optical link based on the optical network topology information and the basic packet capacity. It would not be unreasonable for a network designer to figure out the capacity. In regard to claims 2-4, 9, it is unclear what the “inputs” that are formed are input into. What/where are the inputs formed for or supplied to? This is also a 112 second paragraph problem. It is considered here because it accentuates the problem of no apparatus to provide the method steps. In regard to claim 3, where are the inputs supplied? In regard to claims 5-7, 9 and 11; it is unclear what apparatus is tied to the method steps.

In regard to claims 1, 8, 11, 17 and 24; the steps of the claim do not provide the result of the preamble. The steps of the claims do not provide a method for co-modeling a

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simulated packet network and a simulated optical network etc (generating capacity does not provide a method for co-modeling).

4. Claims 5-7, 21-23 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The claims do not provide a concrete result. It does not appear that the results would be repeatable.

“Per packet (optical) engineering guidelines” of claims 5-7, 21-23 are vague and indefinite. There are many different packet engineering guidelines. It is unclear what the applicant means by this. This does not define concrete criteria. There are different engineering guidelines considered by different people.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-7, 9 and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“Per packet (optical) engineering guidelines” of claims 5-7, 21-23 are vague and indefinite. There are many different packet engineering guidelines. It is unclear what the applicant means by this. In regard to claims 2-4 and 9; it is unclear what the “inputs” that are formed are input into. What are the inputs formed for or supplied to?

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-4, 8, 11, 17-20, 24-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rappaport et al (2005/0043933) in view of Ghani et al ("On IP-over-WDM Integration", of record).

Rappaport et al teach that it is well known to model or simulate in order to make predictions about a network. See paragraph 23. He teaches the simulated model can be for network(s). He teaches that he is concerned with capacity. Capacity is also a well known need when predicting network performance. Although Rappaport et al does not specifically teach a packet network and an optical network, in paragraph 93 he mentions packets and optical frequency bands and protocols. See figures 2 and 3 of Ghani et al. In figure 2 he shows a network comprised of a packet network and an optical network. In figure 3 he shows inputs which determine characteristics of the network. It would have been obvious to simulate the optical and packet networks of Ghani et al as taught by Rappaport et al in order to make performance predictions about the network. In regard to the packet network topology information, at the top of figure 3 of Ghani et al to the far left, he inputs "data network topology". In regard to the packet traffic information, see the top of figure 3 of Ghani et al to the far left, he inputs "user demands/traffic profiles" which would obviously include packet information. In regard to the optical network topology information, at the bottom of figure 3 of Ghani et al to the far left, he inputs "data network topology". In regard to the generating a basic optical capacity, see the top right portion of figure 3 of Ghani et al. He teaches using an optimization algorithm to determine data flow routes and light path channel routes. In that he uses outputs from all of the inputs to the packet and optical network; it would

have been obvious to determine capacity based on this information. In regard to claim 2, he shows providing the data flow routes for the packet network and lightpath channel routes and wavelength assignments (which relates to flow) based on these algorithms. In regard to the packet traffic applied as a matrix, it is well known in to input data in a matrix form. In regard to claims 11 and 27; it is well known to model to determine capacity and would have been obvious.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Leslie Pascal/
Primary Examiner
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